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**US 08/809,620 (TE20070509)**  
Reply to Office Action 04/20/07**A) Amendments to the claims**

In the Reply to Action 02/16/06, with data reference (TE20060717b), the claims listing was not in respect of rule :

- 5 *Canceled and not entered claims must be indicated by only the claim number and satatus, without presenting the text of the claims.*

The new texts of claims listing (TE20060526) and (TE20060717b) respect this rule.

- 10 In the amendments on July 12, 2005, the claims 47 and 48 are identified as new.

They come from former claim twice amended 15 which is twice repeated, once for mirror, and once for actuating membrane.

Perhaps the good identifications would be 15(third amended) and

- 15 15(fourth amended)

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## CLAIMS LISTING (TE20060717b)

without text of the canceled claims, and with new amendments to obtain the clean text of november 04 1999.

## Original filed claims

5 Translation of published PCT text WO 96/10207  
Amended on November 04, 1999

## CLAIMS

1) (amended) ~~Space telescope~~ Optical device comprising:

- 10 ~~a) a first storey containing a membranous mirror and a device actuating the mirror, said mirror actuating and protecting devices;~~  
~~b) a second storey located at the focal plane of the mirror and containing means for observing the image;~~  
~~c) a third storey located at the curvature center of the mirror, and containing means to explore the shape of the mirror;~~  
15 ~~d) a accessory light device lighting the object scrutinized by the optical system;~~  
~~e) a means to render jointly the three storey and the accessory light device;~~

characterized in that:

- 20 ~~f) the mirror and its the actuating device are independant concave membranes (called membranous mirror and actuating membrane) constituted by concentric membranes, free at their peripheries and tied by their central parts, directly or by an intermediate device;~~  
~~g) the membranes, or only the actuating membrane, have surface devices, conductors, insulators, and semi-conductors, separed, contiguous or~~  
25 ~~stacked, constituting integrated circuits, and surface electrodes, having particulaaarly coils shape.~~

2) (canceled)

3) (canceled)

30 4) (canceled).

5) (canceled)

6) (canceled)

7) (canceled)

8) (canceled)

35 9) (canceled)

10) (canceled)

11) (canceled)

12) (canceled)

13) (canceled)

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14) (amended) Telescope Optical device according to claim 1, characterized in that the actuating membrane and the membranous mirror ~~mirror and its actuating membrane~~ are made totally or partially of a material having shape memory.

5 15) (amended) Optical device Telescope according to claim 1, characterized in that, for their folding, the concave actuating membrane and the concave membranous mirror ~~mirror and its actuating membrane~~ are made quasi plane by the formation of concentric circular undulations obtained flat by a succession of centred distortions, alternatately concave and convex.

10 16) (canceled)

17) (canceled)

18) (twice amended) Optical device Telescope according to claim 1, characterized in that the actuating membrane and the membranous mirror ~~membranes constituting the mirror and the actuating membrane~~ are obtained by materiel deposit ~~depositing a substance~~ on a liquide contained in a vertical container rotating around a its vertical axis.

15 19) (twice amended) Optical device Telescope according to claim 1, characterized in that the membranous mirror and the actuating membrane ~~membranes~~ have peripheral and/or central flanges ~~shaped on the walls of the container.~~

20 20) (canceled)

21) (canceled)

22) (canceled)

23) (canceled)

25 24) (canceled)

25) (canceled)

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27) (canceled)

28) (canceled)

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30) (canceled)

31) (canceled)

32) (canceled)

33) (canceled)

35 34) (canceled)

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38) (canceled)

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39) (canceled)

40) (canceled)

41) (canceled)

42) (canceled)

5 43) (canceled)

44) (new) Optical device according to claim 1 characterized in that the distance between the actuating membrane and the membranous mirror is monitored permanently by capacitive coupling between said actuating membrane and said membranous mirror.

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**US 08/809,620 (TE20070509)**  
Reply to Office Action 04/20/07**CLEAN CLAIMS AFTER AMENDMENTS MADE ON NOVEMBER 04, 1999****11/04/99 CLAIMS - Reference (TE991015)**

**1 (amended).** Optical device comprising a mirror and a device actuating the mirror,  
characterized in that the mirror and the actuating device are independent concave  
5 membranes (called membranous mirror and actuating membrane).

**14 (amended)-** Optical device according to claim 1 characterized in that the actuating  
membrane and the membranous mirror are made totally or partially of a material having  
shape memory.

**15 (amended)-** Optical device according to claim 1 characterized in that, for their folding,  
10 the concave actuating membrane and the concave membranous mirror are made quasi plane  
by the formation of concentric circular undulations obtained by a succession of centred  
distorsion alternately concave and convex, and the quasi plane one thus obtained rolled up  
on itself according to a diameter.

**18 (amended)-** Optical device according to claim 1 characterized in that the actuating  
15 membrane and the membranous mirror are obtained by material deposit on a liquid  
contained in a container rotating around a vertical axis.

**19 (amended)-** Optical device according to claim 1 characterized in that the membranous  
mirror and the actuating membrane have central and/or peripheral flanges

**44 (new)-** Optical device according to claim 1 characterized in that the distance between the  
20 actuating membrane and the membranous mirror is monitored permanently by capacitive  
coupling between said actuating membrane and said membranous mirror.

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